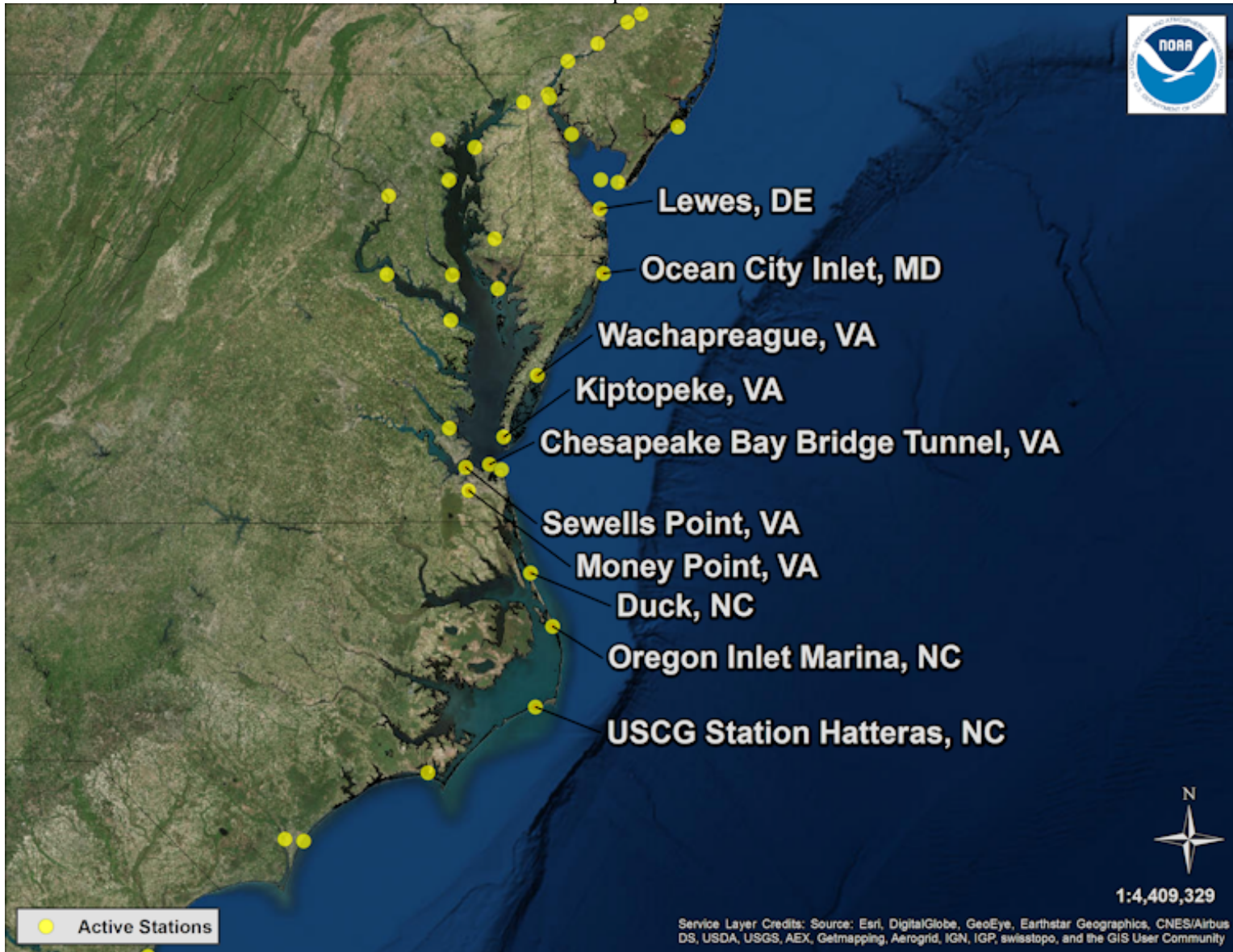




Post-tropical Storm MATTHEW QuickLook
Posted: 18:00 EDT 10/09/2016

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

****Final QuickLook Advisory****

As of 10/09/2016 18:00 EDT, water levels from Cape Hatteras, NC to Lewes, DE including lower Chesapeake Bay remain elevated and range from about 1.5 to 3.5 feet above normal tide levels. However water level residuals appear to be decreasing as Post-Tropical Cyclone Matthew moves offshore.

Winds from Cape Hatteras, NC to Chesapeake Bay Entrance remain high, ranging from about 20 to just over 30 kts with gusts between 40 and 50 kts over the past few hours. Winds at Ocean City, MD and Lewes, DE are also elevated and range from 20-25 kts with gusts. Barometric pressure is rising at all stations.

No further QuickLooks will be posted for this storm unless oceanographic conditions warrant and/or the [National Hurricane Center](#) (NHC) (or [Central Pacific Hurricane Center](#) (CPHC)) [National Weather Service Guam](#) issues a new tropical storm or hurricane warning for the U.S. or its territories.

Water Level and Meteorological plots available below are updated automatically. A line denoting [Mean Higher High Water](#) (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst: PFF

NATIONAL HURRICANE CENTER PUBLIC ADVISORY:

POST-TROPICAL CYCLONE MATTHEW ADVISORY NUMBER 47
NWS NATIONAL HURRICANE CENTER MIAMI FL
500 PM EDT SUN OCT 09 2016

...WINDS DIMINISHING ALONG THE NORTH CAROLINA COAST BUT WATER LEVELS WILL REMAIN
ELEVATED OVERNIGHT...
...THIS IS THE LAST NHC ADVISORY...

SUMMARY OF 500 PM EDT...2100 UTC...INFORMATION

LOCATION...35.4N 72.0W
ABOUT 200 MI...320 KM E OF CAPE HATTERAS NORTH CAROLINA
MAXIMUM SUSTAINED WINDS...75 MPH...120 KM/H
PRESENT MOVEMENT...ENE OR 75 DEGREES AT 15 MPH...24 KM/H
MINIMUM CENTRAL PRESSURE...988 MB...29.18 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

All Tropical Storm Warnings have been discontinued.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

None.

DISCUSSION AND 48-HOUR OUTLOOK

At 500 PM EDT (2100 UTC), the center of Post-Tropical Cyclone Matthew was located near latitude 35.4 North, longitude 72.0 West. The post-tropical cyclone is moving toward the east-northeast near 15 mph (24 km/h), and this general motion is expected to continue tonight.

Maximum sustained winds are near 75 mph (120 km/h) with higher gusts. Some weakening is forecast tonight, and the low is expected to be absorbed within a frontal boundary on Monday.

Hurricane-force winds extend outward up to 90 miles (150 km), primarily to the southwest and west of the center, and tropical-storm-force winds extend outward up to 240 miles (390 km).

The estimated minimum central pressure based on data from a NASA Global Hawk aircraft is 988 mb (29.18 inches).

HAZARDS AFFECTING LAND

WIND: Wind gusts to tropical storm force will continue over portions of the Outer Banks tonight.

STORM SURGE: Dangerously high water levels over portions of the Outer Banks will gradually subside overnight and early Monday. Consult products issued by your local National Weather Service forecast office for additional information.

RAINFALL: Life-threatening flooding will continue over portions of eastern North Carolina that have received record rains from Matthew. Consult products issued by your local National Weather Service forecast office for additional information and warnings.

SURF: Swells generated by Matthew will continue to affect much of the southeastern and Mid-Atlantic coasts of the United States during the next couple of days. These swells will likely cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

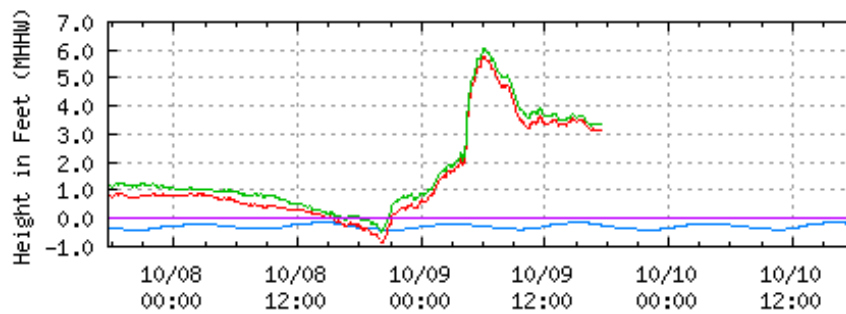
This is the last public advisory issued by the National Hurricane Center on Matthew. Additional information on this system can be found in High Seas Forecasts issued by the National Weather Service, under AWIPS header NFDHSFAT1, WMO header FZNT01 KWBC, and available on the Web at <http://www.opc.ncep.noaa.gov/shtml/NFDHSFAT1.shtml>.

Forecaster Brown

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Money Point - Water Level](#), [Money Point - Winds](#), [Chesapeake Bay Bridge Tunnel - Water Level](#), [Chesapeake Bay Bridge Tunnel - Winds](#), [Chesapeake Bay Bridge Tunnel - Barometric](#), [Sewells Point - Water Level](#), [Kiptopeke - Water Level](#), [Kiptopeke - Winds](#), [Wachapreague - Water Level](#), [Wachapreague - Winds](#), [Ocean City Inlet - Water Level](#), [Ocean City Inlet - Winds](#), [Ocean City Inlet - Barometric](#), [Lewes - Water Level](#), [Lewes - Winds](#)

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

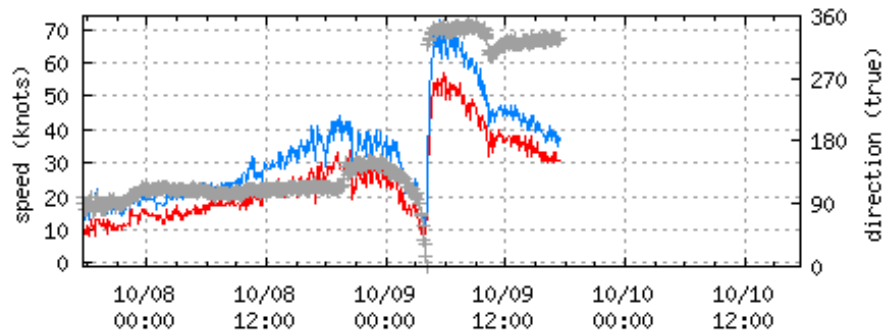
Observed: 3.15 ft. Predicted: -0.24 ft. Residual: 3.39 ft.

Historical Maximum Water Level: Oct 29 2012, 4.02 ft.

Next High Tide: 10/10/2016 04:21 (EDT), -0.18 ft.

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

Wind Speed / Gusts / Direction

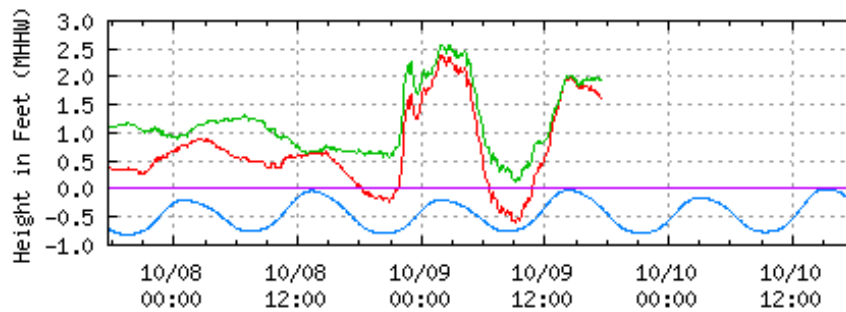


speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 35 knots Gusts: 42 knots Direction: 330° T

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

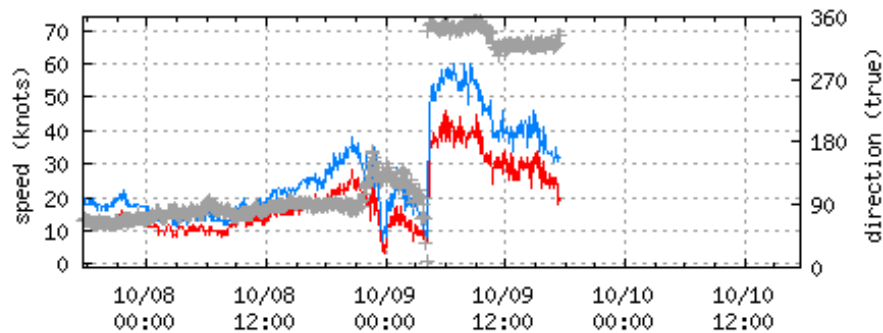
Last Observed Sample: 10/09/2016 17:24 (EDT). Data relative to MHHW

Observed: 1.63 ft. Predicted: -0.32 ft. Residual: 1.95 ft.

Historical Maximum Water Level: Aug 28 2011, 6.32 ft.

Next High Tide: 10/10/2016 03:00 (EDT), -0.16 ft.

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC
Wind Speed / Gusts / Direction

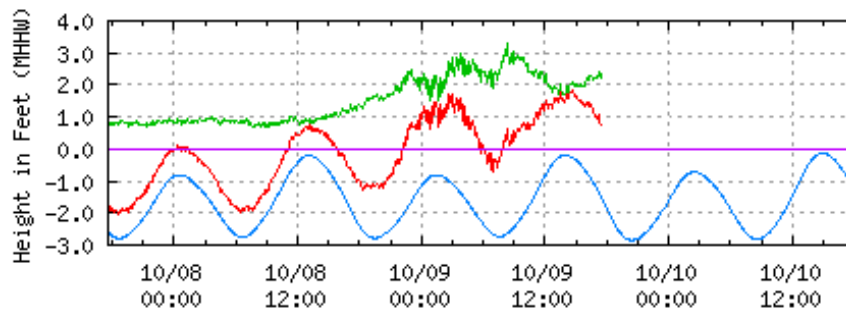


speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:24 (EDT)

Wind Speed: 20 knots Gusts: 32 knots Direction: 334° T

NOAA/NOS/CO-OPS 8651370 Duck, NC
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

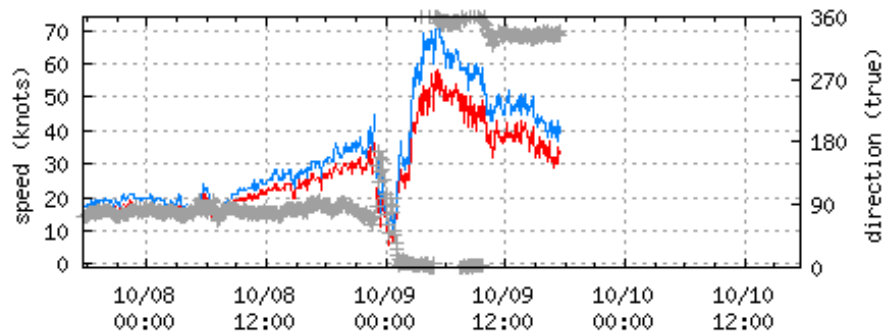
Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

Observed: 0.78 ft. Predicted: -1.55 ft. Residual: 2.33 ft.

Historical Maximum Water Level: Sep 18 2003, 4.13 ft.

Next High Tide: 10/10/2016 02:29 (EDT), -0.73 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC
Wind Speed / Gusts / Direction

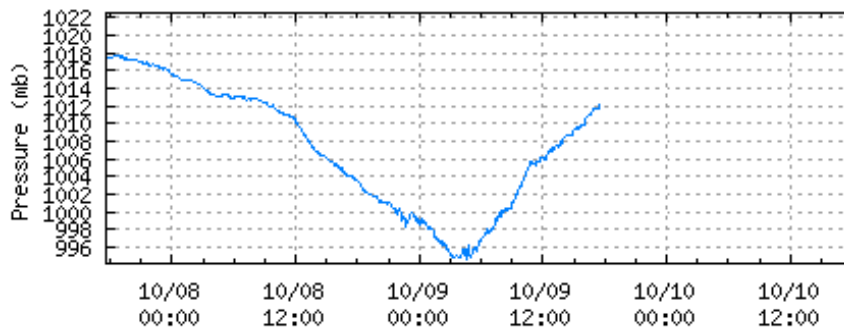


speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 33 knots Gusts: 41 knots Direction: 335° T

NOAA/NOS/CO-OPS 8651370 Duck, NC
Barometric Pressure

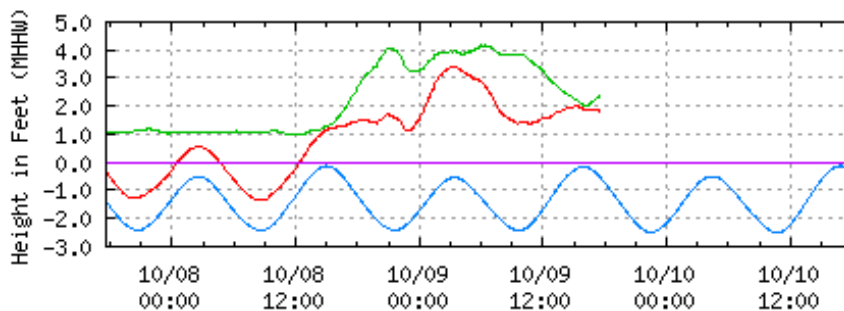


barometric pressure —

Last Observed Sample: 10/09/2016 17:30 (EDT)

Barometric Pressure: 1012.1 mb

NOAA/NOS/CO-OPS 8639348 Money Point, VA
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —
Observed WL —

(Obs-Pred) —
MHHW —

Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

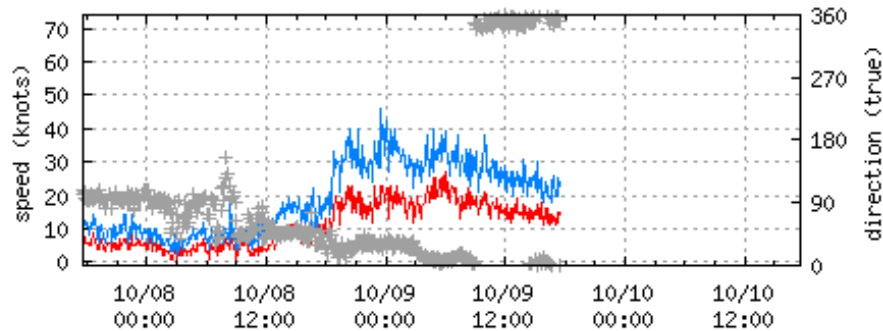
Observed: 1.83 ft. Predicted: -0.52 ft. Residual: 2.35 ft.

Historical Maximum Water Level: Nov 13 2009, 5.37 ft.

Next High Tide: 10/10/2016 04:25 (EDT), -0.49 ft.

NOAA/NOS/CO-OPS 8639348 Money Point, VA

Wind Speed / Gusts / Direction



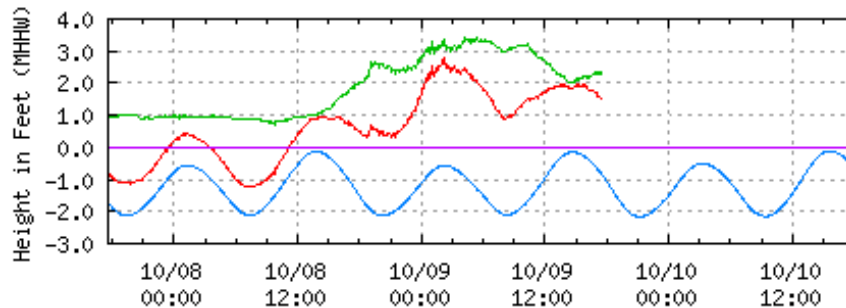
speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 14 knots Gusts: 23 knots Direction: 1° T

NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —
Observed WL —

(Obs-Pred) —
MHHW —

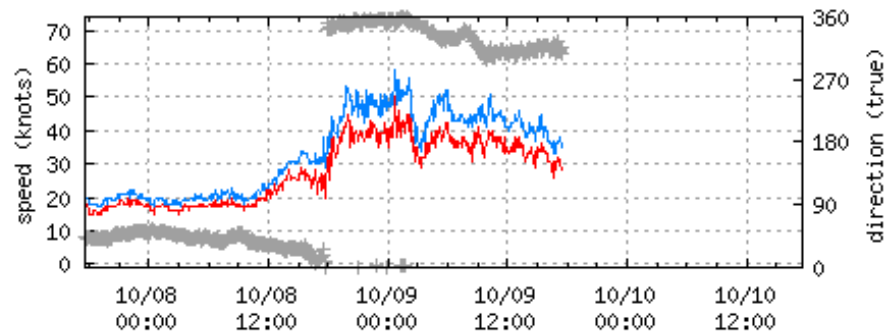
Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

Observed: 1.49 ft. Predicted: -0.84 ft. Residual: 2.33 ft.

Historical Maximum Water Level: Nov 12 2009, 4.66 ft.

Next High Tide: 10/10/2016 03:17 (EDT), -0.51 ft.

NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA
Wind Speed / Gusts / Direction

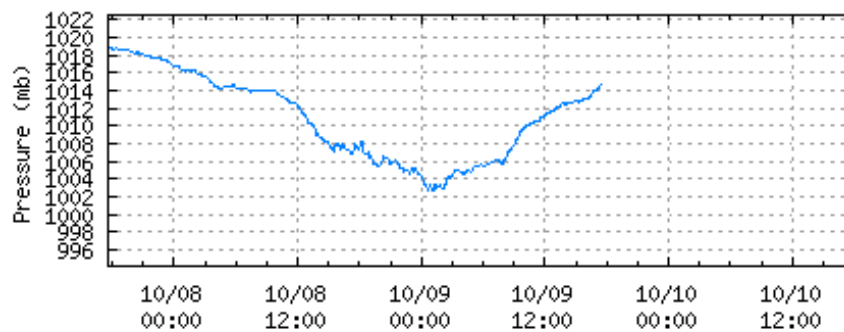


speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 29 knots Gusts: 36 knots Direction: 308° T

NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA
Barometric Pressure

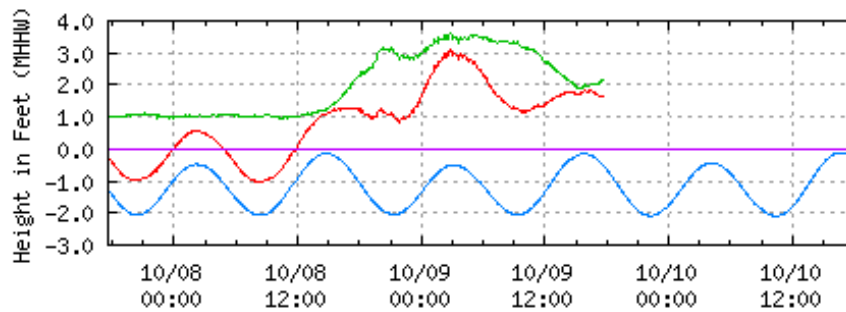


barometric pressure —

Last Observed Sample: 10/09/2016 17:30 (EDT)

Barometric Pressure: 1014.6 mb

NOAA/NOS/CO-OPS 8638610 Sewells Point, VA
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———
Observed WL ——— MHHW ———

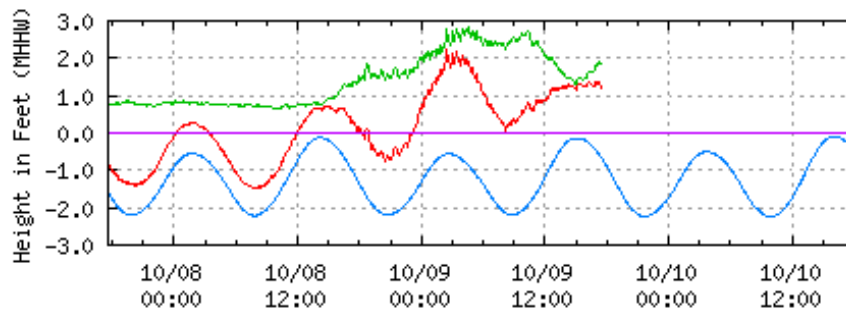
Last Observed Sample: 10/09/2016 17:36 (EDT). Data relative to MHHW

Observed: 1.65 ft. Predicted: -0.50 ft. Residual: 2.15 ft.

Historical Maximum Water Level: Aug 23 1933, 5.26 ft.

Next High Tide: 10/10/2016 04:11 (EDT), -0.44 ft.

NOAA/NOS/CO-OPS 8632200 Kiptopeke, VA
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———
Observed WL ——— MHHW ———

Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

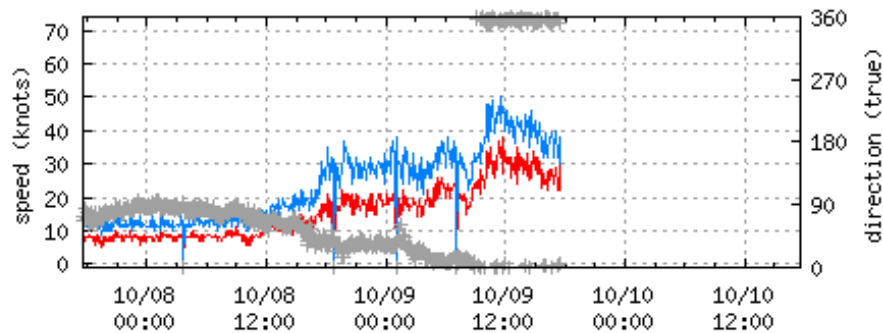
Observed: 1.18 ft. Predicted: -0.67 ft. Residual: 1.85 ft.

Historical Maximum Water Level: Mar 8 1962, 4.13 ft.

Next High Tide: 10/10/2016 03:43 (EDT), -0.50 ft.

NOAA/NOS/CO-OPS 8632200 Kiptopeke, VA

Wind Speed / Gusts / Direction



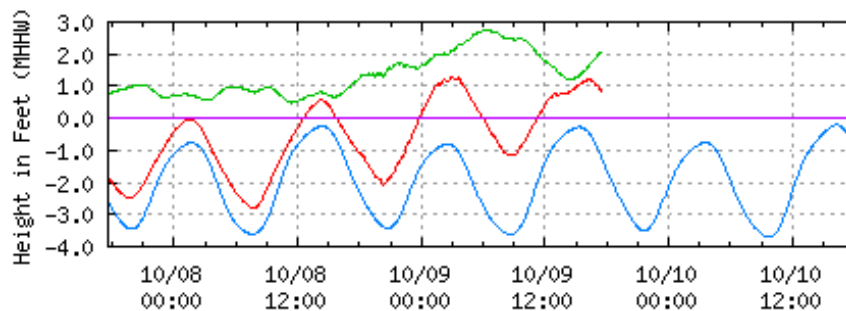
speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 30 knots Gusts: 38 knots Direction: 350° T

NOAA/NOS/CO-OPS 8631044 Wachapreague, VA

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —
Observed WL —

(Obs-Pred) —
MHHW —

Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

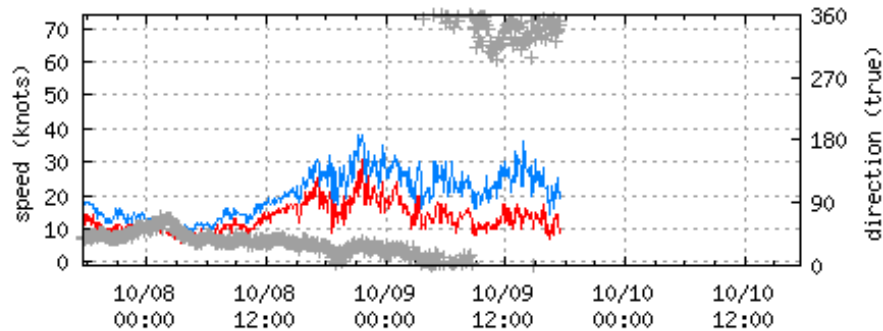
Observed: 0.82 ft. Predicted: -1.24 ft. Residual: 2.06 ft.

Historical Maximum Water Level: Feb 5 1998, 4.41 ft.

Next High Tide: 10/10/2016 03:35 (EDT), -0.76 ft.

NOAA/NOS/CO-OPS 8631044 Wachapreague, VA

Wind Speed / Gusts / Direction



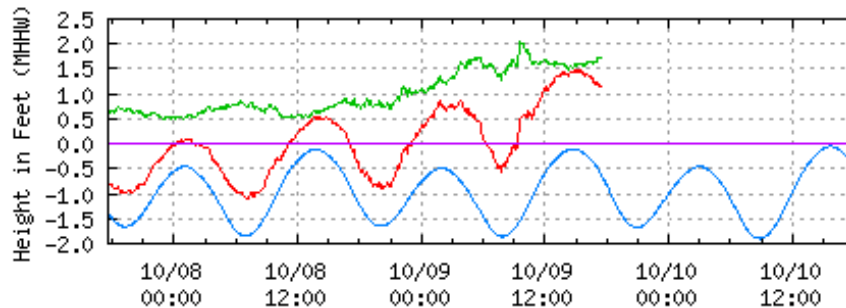
speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 9 knots Gusts: 21 knots Direction: 352° T

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —
Observed WL —

(Obs-Pred) —
MHHW —

Last Observed Sample: 10/09/2016 17:24 (EDT). Data relative to MHHW

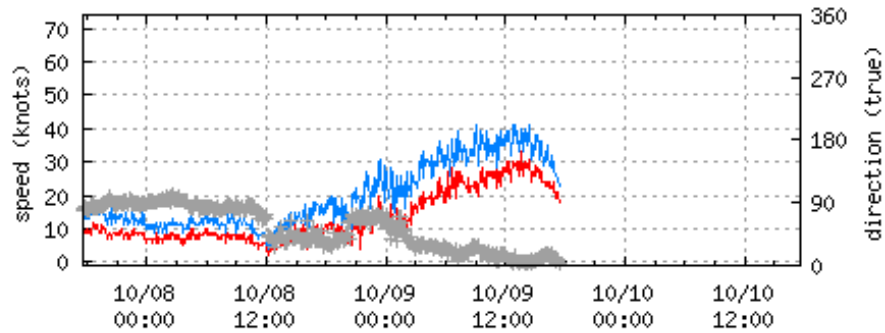
Observed: 1.14 ft. Predicted: -0.59 ft. Residual: 1.73 ft.

Historical Maximum Water Level: Feb 5 1998, 3.61 ft.

Next High Tide: 10/10/2016 03:01 (EDT), -0.46 ft.

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD

Wind Speed / Gusts / Direction



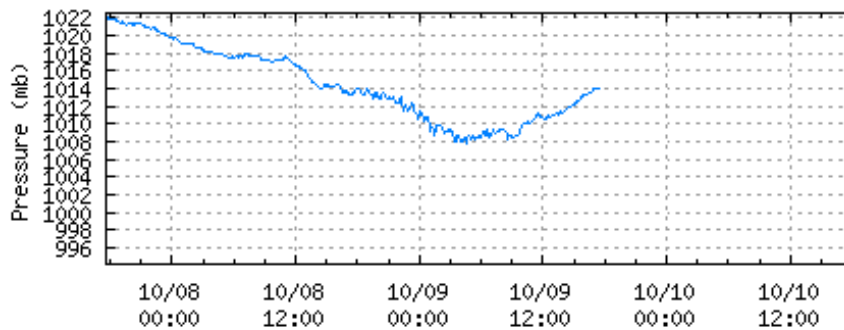
speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:24 (EDT)

Wind Speed: 18 knots Gusts: 23 knots Direction: 4° T

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD

Barometric Pressure

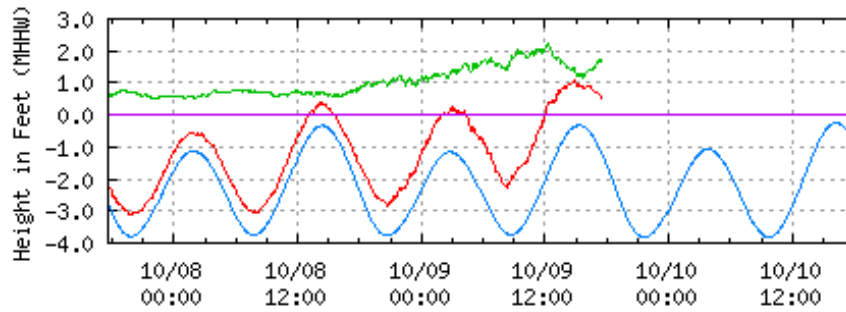


barometric pressure —

Last Observed Sample: 10/09/2016 17:24 (EDT)

Barometric Pressure: 1013.9 mb

NOAA/NOS/CO-OPS 8557380 Lewes, DE
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

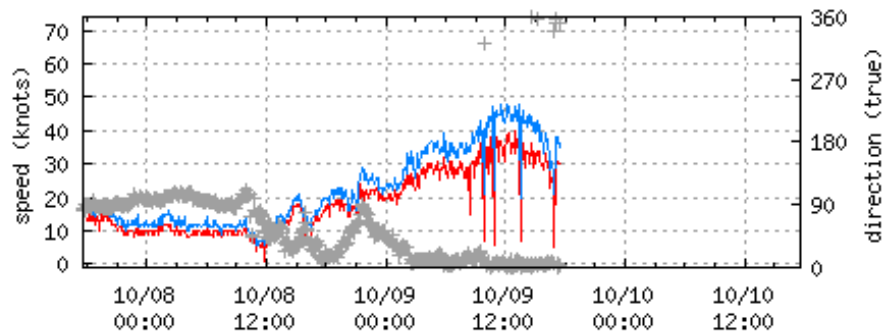
Last Observed Sample: 10/09/2016 17:30 (EDT). Data relative to MHHW

Observed: 0.53 ft. Predicted: -1.19 ft. Residual: 1.72 ft.

Historical Maximum Water Level: Mar 6 1962, 4.57 ft.

Next High Tide: 10/10/2016 03:49 (EDT), -1.07 ft.

NOAA/NOS/CO-OPS 8557380 Lewes, DE
Wind Speed / Gusts / Direction



speed — gusts — direction +

Last Observed Sample: 10/09/2016 17:30 (EDT)

Wind Speed: 30 knots Gusts: 36 knots Direction: 2° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8654467	USCG Station Hatteras, NC	10/09/2016 17:30 (EDT)	3.15 ft	-0.24 ft	3.39 ft	5.76 ft
8652587	Oregon Inlet Marina, NC	10/09/2016 17:24 (EDT)	1.63 ft	-0.32 ft	1.95 ft	2.39 ft
8651370	Duck, NC	10/09/2016 17:30 (EDT)	0.78 ft	-1.55 ft	2.33 ft	1.82 ft
8639348	Money Point, VA	10/09/2016 17:30 (EDT)	1.83 ft	-0.52 ft	2.35 ft	3.43 ft
8638863	Chesapeake Bay Bridge Tunnel, VA	10/09/2016 17:30 (EDT)	1.49 ft	-0.84 ft	2.33 ft	2.79 ft
8638610	Sewells Point, VA	10/09/2016 17:36 (EDT)	1.65 ft	-0.50 ft	2.15 ft	3.10 ft
8632200	Kiptopeke, VA	10/09/2016 17:30 (EDT)	1.18 ft	-0.67 ft	1.85 ft	2.21 ft
8631044	Wachapreague, VA	10/09/2016 17:30 (EDT)	0.82 ft	-1.24 ft	2.06 ft	1.27 ft
8570283	Ocean City Inlet, MD	10/09/2016 17:24 (EDT)	1.14 ft	-0.59 ft	1.73 ft	1.48 ft
8557380	Lewes, DE	10/09/2016 17:30 (EDT)	0.53 ft	-1.19 ft	1.72 ft	1.07 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce